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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Travis M. Mulford

skylight

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EXAMINER

KWIECINSKI, RYAN D

ART UNIT

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3635

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/687,052	Applicant(s) MULFORD ET AL.	
	Examiner RYAN D. KWIECINSKI	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) 9,10,12,15,16 and 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,11 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Newly submitted claims 18-20 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The method of installing a skylight conversion kit can be performed in many materially different ways. Conversion kits can be applied to existing ducting or to ducting that is being installed such as Hoy. The capability language of the structure of claim 1, does not limit the claims to “evaporative cooler ducting” since this is an intended use and capability of the recitation. The method does in fact distinctly limit the installation of the skylight conversion kit. Therefore the original claim for the skylight conversion kit is broader in scope and can be installed using other materially distinct approaches.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 18-20 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

The drawings are objected to because the drawings should not contain descriptive words as labels such as “roof”, “Ceiling”, etc., found in Figure 1. The

Art Unit: 3635

descriptive words should be replaced with reference numerals which are linked to the accompanying specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3635

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-2, 4, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by
US 6,918,216 B2 to Hoy et al.**

Claim 1:

Hoy et al. teach a skylight conversion kit having an open exterior roof end and extending to an open room interior ceiling end comprising:

- a. a ceiling mount (90, Fig.2) with an opening defined by plate support structure (91, Fig.2) adapted to removably secure over the open interior end of the evaporative cooler ducting with a plate positioning segment (80, Fig.2) proximate the ceiling to provide an open light channel between the roof and ceiling openings, said ceiling mount plate support structure adapted to removably hold over the ceiling mount opening and allow the lifting and turning on edge of
- b. one or more insulated stackable decorative plates (88, Fig.2) sized and shaped to cover the ceiling mount opening when mounted on the plate support structure for addition or removal along a diagonal of the ceiling mount opening (the plates of Hoy's assembly are capable of being

Art Unit: 3635

arranged as previous mentioned since the plates are a square shape surrounded by a square mounting plate), whereby the plates are stacked on the ceiling mount plate support structure (91, Fig.2) in a manner which transmits light there through into the interior of a room, and the number of plates is selected and added to provide the desired decorative and insulating properties,

- c. a roof mount (20, Fig.2) with an opening defined by plate securing structure (23, Fig.2) adapted to secure to the roof with its opening positioned over the exterior open roof end of the evaporative cooler ducting (end by 64, Fig.2), and seal thereto on the plate securing structure (54, Fig.2)
- d. at least one insulated light transmitting plate (37, Fig.2) sized to cover and seal the roof mount opening (Column 2, lines 41-56) to allow exterior light to enter and pass through evaporative cooler ducting, while insulating the exterior end of the light channeling system opening and preventing heat transfer and the entrance of moisture, bugs, and dust (54, Fig.2).

The recitations “evaporative cooler ducting of a removed evaporative cooler” and “evaporative cooler ducting” are recitations of capability and intended use of the ducting of the skylight conversion kit. The ducting of the claims is used as a light channeling system; therefore the tubing of Hoy fulfils the capabilities of the ducting of the claims. This holds argument is upheld throughout the following claims.

Art Unit: 3635

Claim 2:

Hoy et al. teaches a skylight conversion kit according to Claim 1, including a decorative trim finish associated with the ceiling mount (underside of 90, Fig.2) to hide any evidence of the evaporative cooler ducting ceiling mount is secured in position proximate the ceiling.

Claim 4:

Hoy et al. teaches a skylight conversion kit according to Claim 1, wherein the insulated light transmitting plate covering the exterior end of the evaporative cooler ducting is flat to minimize roof obstruction and wind noise (37, Fig.2).

Claim 6:

Hoy et al. teaches a skylight conversion kit according to claim 4, wherein the decorative plates are patterned and colored to suit the preference of the user (Column 1, lines 54-57). The plates may be diffuser panels or lenses. The preference of the user is not structurally patentable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,918,216 B2 to Hoy et al. in view of US 2003/0000158 A1 to Borges.

Claim 3:

Hoy et al. teaches a skylight conversion kit according to Claim 1, but does not teach including an insulating wrap adapted to secure about the exterior of the evaporative cooler ducting and provide the desired insulation. Borges teaches including an insulating wrap adapted to secure about the exterior of the evaporative cooler ducting and provide the desired insulation (24, 24', Fig.2 and 3 respectively). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an insulating wrap about the exterior of the evaporative cooler ducting in order to provide insulation of the tubing to keep the temperatures of the air from changing the temperatures within the building. Using insulation is notoriously well known in the art.

Claim 8:

Hoy et al. teaches a skylight conversion kit according to Claim 1, wherein the plate positioning segment is a rectangular tube (80, Fig.2) with a square cross-section (80, 84, Fig.2), and the ceiling mount opening (90, Fig.2) and decorative plates (88, Fig.2) are square shaped so that the decorative plates may be lifted and turned on edge within the plate positioning segment for addition or removal through the diagonal opening of the ceiling mount. Hoy et al. does not teach wherein the evaporative cooler ducting is a rectangular tube with a square cross-section. Borges teaches wherein the evaporative cooler ducting is a rectangular tube with a square cross-section. It would have been obvious to one

Art Unit: 3635

of ordinary skill in the art at the time the invention was made to have constructed Hoy's skylight assembly with a rectangular tube with a square cross-section. Using rectangular tubes in skylight assemblies would eliminate the need for an adapter box to be used to connect the rectangular tube to the rectangular mounting plates, therefore reducing the amount of parts as well as cost.

Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,918,216 B2 to Hoy et al. in view of US 5,103,603 to Verby et al.

Claim 5:

Hoy et al. teaches a skylight conversion kit according to Claim 1, but does not teach including a perimeter gasket system placed between and along the perimeter edges of a plurality of insulated stacked decorative plates to isolate them and absorb vibration to prevent accidental contact and vibration damage. Verby et al. teaches a perimeter gasket system (52,54,56, Fig.2) placed between and along the perimeter edges of a plurality of insulated stacked decorative plates (16, Fig.2) to isolate them and absorb vibration to prevent accidental contact and vibration damage. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a gasket system in Hoy's skylight system in order to prevent to plates from coming in contact with one another as well and other parts of the skylight system.

Art Unit: 3635

Claim 11:

Hoy et al. teaches a skylight conversion kit according to Claim 1, but does not teach wherein the roof mount is adapted to tilt open the light transmitting plate on the roof in an open mode to allow air to pass through the evaporative cooler ducting and into the interior of the room when the decorative plates are removed, and to close in a closed mode to seal the evaporative cooler ducting when the decorative plates are in place to provide an insulated skylight.

Verby et al. teaches the roof mount is adapted to tilt open the light transmitting plate (74, 84, 86, Fig.2) on the roof in an open mode to allow air to pass through the evaporative cooler ducting and into the interior of the room when the decorative plates are removed, and to close in a closed mode to seal the evaporative cooler ducting when the decorative plates are in place to provide an insulated skylight.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have hingedly connected the upper plate to the roof mount in order to allow the skylight to open to allow air to circulate through the house. It would also be paramount in allowing air to circulate through the evaporative cooler ducting to remove unwanted condensation.

Art Unit: 3635

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,918,216 B2 to Hoy et al. in view of US 5,103,603 to Verby et al. in view of US 2004/0040228 A1 to Emde et al.

Claim 7:

Hoy et al. and Verby et al. teach a skylight conversion kit according to Claim 5, but do not teach wherein each decorative plate has different insulating properties and is employed in multiples to provide the desired insulating factor. Emde et al. teaches wherein each decorative plate has different insulating properties and is employed in multiples to provide the desired insulating factor (Page 2, Para.21, Lines 1-6; Page 3, Para.36, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included decorative plates made from different materials in Hoy's skylight conversion kit. Decorative plates constructed from different materials will have different insulating properties, which would allow the user to use the plates in different combinations to create different insulating factors in the skylight assembly.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,918,216 B2 to Hoy et al. in view of US 5,528,471 to Green.

Art Unit: 3635

Hoy discloses the skylight conversion kit of claim 1, but does not disclose including a light attached to existing house wiring and placed within the existing ducting of a removed swamp cooler to provide combination natural light and night light.

Green discloses including a light attached to existing house wiring and placed within the existing ducting to provide combination natural light and night light (30, Fig.2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the skylight conversion kit of Hoy to have included lamp fixtures in order to provide the inner room with both natural and artificial light. Artificial light will provide lighting to the room when natural light is not available such as night time or overcast days.

Response to Arguments

Applicant's arguments filed 07 November 2007 have been fully considered but they are not persuasive.

Applicant argues that Hoy is not a skylight conversion kit for an evaporative cooler. As stated above in claim 1, the "existing evaporative ducting" is a capability and intended use of ducting which is ultimately used as a light channeling system. The tubing of Hoy is capable and intended as a light channeling system.

Applicant argues that Hoy does not disclose the plates being able to rotate and be removed along a diagonal of the ceiling mount opening. This is a capability of the

Art Unit: 3635

plates, and the plates of Hoy being fitted to cover the opening will when placed diagonally, be able to drop down through the diagonal of the ceiling mount opening.

Applicant also argues that Hoy does not provide decorative trim, this is not found persuasive. As shown in the rejection above, the underside of the ceiling mount 90 acts as decorative trim which hides the opening of the ducting. Hoy also discloses as shown in the rejections above, the flat top of the top insulative light transmitting plate.

The arguments regarding claim 6 are not found persuasive. Hoy discloses using a plate or a lens which therefore means different types of plates may be used. The term "decorative" does not provide additional structural limitations to the claims. A clear plate can be a "decorative" plate.

Borges does in fact disclose an insulating wrap. Therefore Borges in combination with the system of Hoy discloses the structural limitations of claim 3. It also would have been notoriously well known to simply change the shape of the ducting of the skylight system to a rectangular cross section as disclosed by Borges.

Verby does in fact disclose gaskets surrounding the plates of the skylight system and also hinges which allow the skylight system to tilt open. These two structural limitations in combination with the skylight system of Hoy disclose the structural limitations of the present claims. It is notoriously well known to seal the edges of plates and also to provide hinges which will allow the plates to be changed as well as the inside of the skylight to be cleaned.

Although Emde disclose a panel with solar cells, etc. but does in fact disclose a panel with different insulative properties throughout. It would have been obvious to

Art Unit: 3635

have used a well known structural panel as the plate assembly of the skylight of Hoy in order to gain the desired insulation properties of the skylight system.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN D. KWIECINSKI whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 9 am to 5 pm.

Art Unit: 3635

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571)272-6846. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./
Supervisory Patent Examiner, Art Unit 3635

RDK

/Ryan D Kwiecinski/
Examiner, Art Unit 3635